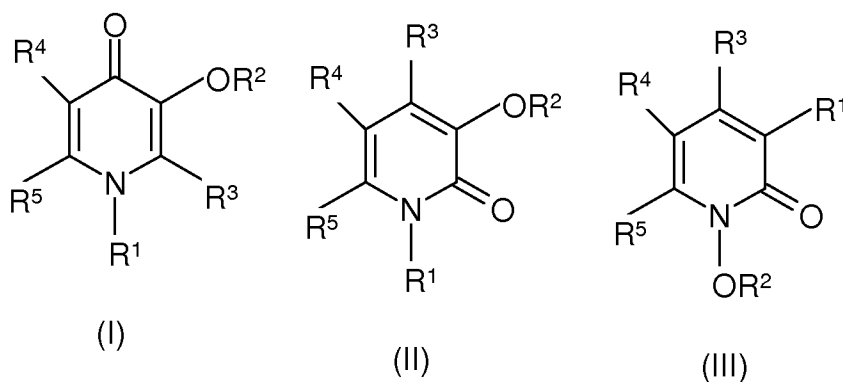


12/18/2008

Claims:

1. **(Currently amended)** A method for treating a skin microcirculatory disorder (SMD) comprising topically administering a hydroxypyridonone of formulae (I-III):



wherein

R<sup>1</sup> represents a (C<sub>1</sub>-C<sub>10</sub>)- alkyl, (C<sub>1</sub>-C<sub>10</sub>)-alkenyl, (C<sub>1</sub>-C<sub>10</sub>)-alkoxy, (C<sub>1</sub>-C<sub>10</sub>) hydroxyalkyl, (C<sub>5</sub>-C<sub>12</sub>)-aralkyl, (C<sub>3</sub>-C<sub>12</sub>)-cycloalkyl, (C<sub>1</sub>-C<sub>8</sub>)- carboalkoxy or (C<sub>1</sub>-C<sub>8</sub>)- carbamyl, or a (C<sub>10</sub>-C<sub>30</sub>)-peptide , or a (C<sub>3</sub>-C<sub>6</sub>) polyol or monosaccharide;

R<sup>2</sup> represents an hydrogen atom or a linear or branched, saturated or unsaturated lo (C<sub>1</sub>-C<sub>22</sub>)-acyl, optionally substituted by (C<sub>1</sub>-C<sub>8</sub>)-alkoxy, carboxy, (C<sub>1</sub>-C<sub>8</sub>) alkoxy carbonyl, amino, hydroxy, said amino and hydroxy being optionally (C<sub>1</sub>-C<sub>22</sub>)-acylated or - alkylated;

R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup>, each individually, represent a hydrogen atom, or (C<sub>1</sub>-C<sub>10</sub>)-alkyl, (C<sub>1</sub>-C<sub>10</sub>)- alkenyl, (C<sub>1</sub>-C<sub>10</sub>)-alkoxy, (C<sub>5</sub>-C<sub>12</sub> aryl) alkyl, (C<sub>5</sub>-C<sub>12</sub> )-cycloalkyl, (C<sub>1</sub>-C<sub>8</sub> carbo)-alkoxy or (C<sub>1</sub>-C<sub>8</sub>)-carbamyl group;

with the proviso that both R<sup>1</sup> and R<sup>3</sup> are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof.

2. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is rosacea.

3. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is cutaneous vasculitis.

4. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is actinic purpura.

5. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is a skin capillaritis.

6. **(Previously presented)** A method according to claim 8, wherein the skin capillaritis is, purpura annularis telangiectodes, contact allergy skin capillaritis, itching purpura, or eczematid-like purpura.

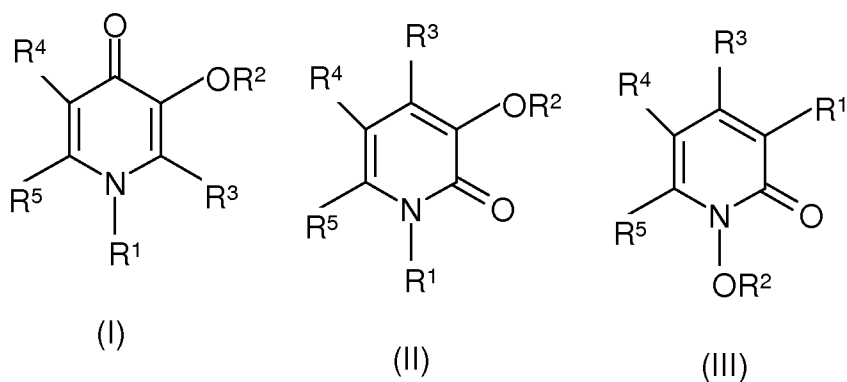
7. **(Cancelled)**

8. **(Withdrawn)** A method according to claim 1, wherein  $R^1$  and  $R^2$  are methyl,  $R^3$  and  $R^4$  are hydrogens.

9. **(Withdrawn)** A method according to claim 1, wherein  $R^1$  and  $R^2$  are ethyl  $R^3$  and  $R^4$  are hydrogens.

10. **(Withdrawn)** A method according to claim 1, wherein  $R^1$  is  $\text{CH}_2\text{CH}_2\text{OH}$ ,  $R^2$  is methyl or ethyl, and  $R^3$  and  $R^4$  are hydrogens.

11. **(Previously presented)** A method for the treatment of skin microcirculatory disorder (SMD) comprising locally applying to a mammal in need thereof of a therapeutically effective amount of hydroxypyridonone compound of formulae (I-III):



wherein

$R^1$  represents a  $(\text{C}_1\text{-C}_{10})$ - alkyl,  $(\text{C}_1\text{-C}_{10})$ -alkenyl,  $(\text{C}_1\text{-C}_{10})$ -alkoxy,  $(\text{C}_1\text{-C}_{10})$  hydroxyalkyl,  $(\text{C}_5\text{-C}_{12})$  -aralkyl,  $(\text{C}_3\text{-C}_{12})$ -cycloalkyl,  $(\text{C}_1\text{-C}_8)$ - carboalkoxy or  $(\text{C}_1\text{-C}_8)$ - carbamyl, or a  $(\text{C}_{10}\text{-C}_{30})$ -peptide or a  $(\text{C}_3\text{-C}_6)$  polyol or monosaccharide;

$R^2$  represents an hydrogen atom or a linear or branched, saturated or unsaturated  $(\text{C}_1\text{-C}_{22})$ -acyl, optionally substituted by  $(\text{C}_1\text{-C}_8)$ -alkoxy, carboxy,  $(\text{C}_1\text{-C}_8)$  alkoxy carbonyl, amino, hydroxy, said amino and hydroxy being optionally  $(\text{C}_1\text{-C}_{22})$ -acylated or - alkylated;

$R^3$ ,  $R^4$  and  $R^5$ , each individually, represent a hydrogen atom, or  $(\text{C}_1\text{-C}_{10})$ -alkyl,  $(\text{C}_1\text{-C}_{10})$ - alkenyl,  $(\text{C}_1\text{-C}_{10})$ -alkoxy,  $(\text{C}_5\text{-C}_{12})$  aryl alkyl,  $(\text{C}_5\text{-C}_{12})$ -cycloalkyl,  $(\text{C}_1\text{-C}_8)$  carbo)-alkoxy or  $(\text{C}_1\text{-C}_8)$ - carbamyl group;

with the proviso that both  $R^1$  and  $R^3$  are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof

in admixture with a dermatologically/cosmetically acceptable carrier.

12. **(Previously presented)** A method according to claim 11, for the treatment of rosacea, cutaneous vasculitis, or actinic purpura.

13. **(Previously presented)** A method according to Claim 11, for the treatment of itching purpura, purpura annularis telangiectodes or contact allergy skin capillaritis.

14. **(Previously presented)** A method according to Claim 11, for the treatment of traumatic skin haemorrhage or actinic purpura.

15. **(Withdrawn)** A method according to claim 11, wherein  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$ , each individually, represent a hydrogen atom.

16. **(Previously presented)** A method according to claim 11, wherein  $R^1$  and  $R^3$  each individually, represent ( $C_1$ - $C_4$ )- alkyl, hydroxyalkyl or alkoxy.

17. **(Withdrawn)** A method according to claim 11, wherein said  $R^2$  acyl group is formed by unbranched, naturally occurring caprylic acid, cupric acid, lauric acid, myristic acid, palmitic acid, palmitoleic acid, stearic acid, oleic acid, vaccenic, linoleic acid, alpha-linolenic acid, eleostearic, delta-linolenic acid, gondoic acid, dihomo- $\gamma$ -linolenic acid, arachidonic acid, eicosapentaenoic acid, docosenoic acid, docosatekaenoic acid, docosapentaenoic acid, docosapentaenoic, docosahehexaenoic acid, nervonic or a mixture thereof.

18. (**Withdrawn**) A method according to claim 11, wherein said R<sup>2</sup> acyl is a C<sub>1-8</sub> which is branched at the carbon atom adjacent to the carbonyl group.

19. (**Previously presented**) A method according to claim 11, wherein said hydroxypyridonone is 1, 2 dimethyl-3-hydroxy-4-pyridinone (deferiprone); 1,2-diethyl-3- hydroxy- 4-pyridinone; 1-methyl-2-ethyl-3-hydroxy-4-pyridinone or 1-methyl-2-(2-methoxy-ethyl)-3-hydroxy-4-pyridinone.